

What Is Claimed Is:

1. A method of driving a liquid crystal display,
comprising:

modulating source data using registered data previously
provided and supplying the modulated data to a liquid crystal
panel at an initial period of one frame period; and

applying data different from the modulated data to the
liquid crystal panel at a later period of the one frame period.

2. The method according to claim 1, wherein the data
applied to the liquid crystal panel at the later period is the
source data.

3. The method according to claim 1, further comprising:
dividing the source data of a current frame period into most
significant bit data and least significant bit data;
delaying the most significant bit data for one frame period;
and

selecting the modulated data through a comparison of the current and delayed most significant bit data.

4. The method according to claim 1, further comprising:
delaying entire bit data of the source data for one frame period; and

selecting the modulated data through a comparison of the current and delayed entire bits of the source data.

5. The method according to claim 1, wherein the later period begins at a half period of the one frame period.

6. The method according to claim 2, wherein the source data are not applied to the liquid crystal panel while the modulated data are applied thereto.

7. An apparatus for driving a liquid crystal display, comprising:

a modulator modulating source data using registered data;
and

a data provider alternatively applying the modulated data and data different from the modulated data to the liquid crystal panel within one frame period.

8. The apparatus according to claim 7, wherein the data different from the modulated data is the source data.

9. The apparatus according to claim 7, wherein the modulator comprises,

a delay circuit delaying most significant bit data of the source data of a current frame and outputting one frame delayed most significant bit data; and

a look-up table selecting the registered data through a comparison of the current and delayed most significant bit data.

10. The apparatus according to claim 7, wherein the modulator selects the registered data through a comparison of entire bits of the current and delayed source data.

11. The apparatus according to claim 7, wherein the data provider comprises,

a switch alternatively switching the data and the modulated data;

a timing controller applying the source data to the modulator and controlling a switching time of the switch; and

a line memory holding the data for less than one frame period and outputting the data to the switch.

12. The apparatus according to claim 11, wherein the timing controller generates a switching control signal inverted in a logic value within the one frame period to alternatively switch the modulated data and the source data within the one frame period.

13. The apparatus according to claim 11, wherein the timing controller generates a dot clock a frequency twice greater than that of the source data to sequentially select the modulated data and the source data within the one frame period.

14. The apparatus according to claim 11, wherein the switch alternatively switches the source data and the modulated data at a half period of the one frame period.

15. The apparatus according to claim 7, wherein the data provider includes a delay circuit delaying the source data while the modulated data are applied to the liquid crystal panel.

16. The apparatus according to claim 7, further comprising,
a data driver applying the modulated data and the source data received alternatively from the switch to a plurality of data lines on the liquid crystal panel; and
a scanning driver applying a scanning pulse to a plurality of scanning lines on the liquid crystal panel.

17. The apparatus according to claim 16, wherein the scanning pulse has a frequency high enough to scan twice entire scanning lines on the liquid crystal panel within the one frame period.

18. A liquid crystal display comprising:

a liquid crystal display panel displaying images and having a plurality of data lines and a plurality of scanning lines thereon;

a modulator modulating source data based on registered data previously provided therein; and

a data provided alternatively applying the modulated source data and the source data to the liquid crystal panel through the data lines within one frame period.

19. The liquid crystal display according to claim 11, wherein the data provider comprises,

a switch alternatively switching the data and the modulated data;

a timing controller applying the source data to the modulator and controlling a switching time of the switch; and

a line memory holding the data for less than one frame period and outputting the data to the switch.

20. The liquid crystal display panel according to claim 18, wherein the data provider applies the modulated source data to the liquid crystal display for a first half frame period and the source data to the liquid crystal display for a second half period.